

**REMARKS**

Claims 1, 2, 4-7 and 11 are pending in this application. By this Amendment, claims 1-6 have been amended, claims 3 and 8-10 have been canceled without prejudice to or disclaimer of the subject matter recited therein, and claim 11 has been added. Support for the amendment to claim 1 can be found at least at pg. 9, line 1 - pg. 11, line 19 of the specification and at least in Figs. 3-6. Support for the subject matter of claim 11 can be found at least at pg. 8, lines 1-24 of the specification and at least in Figs. 1-2. Claims 2-6 have been amended only to correct informalities. Thus, no new matter has been added.

**I. Allowable Subject Matter**

Applicants graciously appreciate the allowance of claims 6 and 7. Claim 6 has been amended merely to correct informalities. Therefore, Applicants respectfully submit that claim 6 should continue to remain allowed. Further, Applicants respectfully submit that the other pending claims are also allowable for at least the reasons discussed herein.

**II. Objections to the Specification**

The Office Action objects to the Abstract as allegedly failing to comply with formalities. The Abstract has been replaced with the attached Substitute Abstract responsive to the objection.

The Office Action objects to the specification for failing to include a Brief Description of Figs. 8A-8E. The specification has been amended responsive to the objection.

Accordingly, withdrawal of the objections to the specification is respectfully requested.

**III. Claim Objections**

The Office Action objects to claims 4 and 5 as allegedly failing to comply with formalities. Claims 4 and 5 have been amended responsive to the objection.

Accordingly, withdrawal of the objections is respectfully requested.

**IV. 35 U.S.C. §102 and 103 Rejections**

The Office Action rejects claims 1 and 4 under 35 U.S.C. §102(e) as being anticipated by JP-A-2001-005368 (hereinafter "Takizawa"); rejects claims 2, 5 and 9-10 under 35 U.S.C. §103(a) as being unpatentable over Takizawa in view of U.S. Patent No. 4,775,225 (hereinafter "Tsuboyama I"); and rejects claims 3 and 8 under 35 U.S.C. §103(a) as being unpatentable over Takizawa in view of U.S. Patent No. 4,674,839 (hereinafter "Tsuboyama II").

Claims 8-10 have been canceled thereby rendering the rejections with respect to these claims moot. The rejections with respect to the pending claims are respectfully traversed.

Takizawa fails to disclose "wherein the spacer is formed in a lattice configuration so as to form lattice cells, the holographic material layer inside the lattice cells forming recording areas of the holographic recording material layer," as recited by claim 1.

Takizawa discloses ring-shaped spacers 4 and 5 arranged between substrates 2 and 3 (see Drawing 1). Thus, the recording area in Takizawa is simply a single, annular space between the spacers 4 and 5.

Further, neither Tsuboyama I nor Tsuboyama II cure the deficiencies of Takizawa at least with respect to the above-quoted feature of claim 1. Specifically, neither Tsuboyama I nor Tsuboyama II disclose or render obvious "wherein the spacer is formed in a lattice configuration so as to form lattice cells, the holographic material layer inside the lattice cells forming recording areas of the holographic recording material layer," as recited by claim 1.

Tsuboyama I discloses an orientation controlling film 306 applied as a coating to a base plate 302 and subjected to a uniaxial orientation treatment. Tsuboyama I further discloses forming spacers 307 from an insulating film disposed on the base plate 302 by etching the insulating film into a prescribed pattern using standard photolithographic techniques (see Figs. 3A and 3B and col. 4, lines 37-65).

However, the spacers 307 of Tsuboyama I are merely projections or dots. The spacers 307 are not "formed in a lattice configuration so as to form lattice cells, the holographic material layer inside the lattice cells corresponding to recording areas of the holographic recording material layer," as recited by claim 1.

Further, Tsuboyama II fails to cure the deficiencies of Takizawa and Tsuboyama I at least with respect to the above-quoted feature of claim 1.

In addition, none of the applied references disclose or render obvious "necked parts for letting a liquid holographic recording material in and out of the recording areas formed in peripheries of the fibers in a longitudinally intermittent fashion," as recited by claim 5.

In addition, Takizawa fails to disclose "the fibers form at least one connection gap therebetween for each of the recording areas," as recited by claim 4. Takizawa discloses a single recording area formed between spacers 4 and 5 and a single gap 4a in the spacer 4. Thus, Takizawa fails to disclose at least one connection gap formed between fibers for each of the recording areas. Further, Tsuboyama I and Tsuboyama II fail to at least cure this deficiency of Takizawa.

Therefore, independent claim 1 is patentable. Claim 2 is patentable for at least reasons similar to those presented above with respect to the patentability of claim 1. Claims 4 and 5 are also patentable for at least their dependency from claim 1 as well as for the additional features they recite.

Accordingly, withdrawal of the rejections is respectfully requested.

**V. Claim 11 Defines Patentable Subject Matter**

Applicants respectfully submit that claim 11 is directed to patentable subject matter. None of the applied references disclose or render obvious "a spacer integrally embedded in the holographic recording material layer, the spacer being composed of a large number of beads for regulating a gap between the two transparent substrates, wherein the spacer is arranged around each of the recording areas of the holographic recording material layer," as recited by claim 11.

Tsuboyama II discloses substrates 3a and 3b, stripe electrodes 4a and 4b respectively formed on the substrates 3a and 3b, and polyimide films 5a and 5b covering the electrodes. Tsuboyama II further discloses 1  $\mu$ m dot spacers 6 of polyimide formed on either one of the polyimide films 5a and 5b for retaining the thickness of the liquid crystal layer 7 (see col. 3, lines 37-45).

The spacers 6 of Tsuboyama II are formed in the polyimide films 5a and 5b and are not formed in the liquid crystal layer 7, and thus Tsuboyama II fails to disclose "a spacer integrally embedded in the holographic recording material layer," as recited by claim 11. Further, the spacers 6 are provided merely to maintain a uniform thickness of the liquid crystal layer 7, and thus are not "arranged around each of the recording areas of the holographic recording material layer," as recited by claim 11. Further, the spacers 6 cannot be formed as beads in the polyimide films 5a and 5b, but are column shaped or disk shaped.

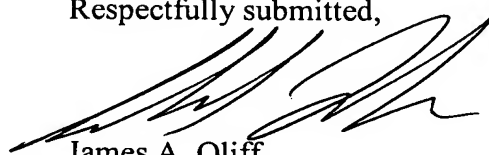
Therefore, claim 11 is patentable. Claim 2 is also patentable for at least its dependency from claim 11 as well as for the additional features discussed above.

**VI. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:  
Substitute Abstract

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